

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 7 and 9 and ADD new claims 32, 33 and 34 in accordance with the following:

1. (currently amended) A method of adjusting tonal characteristics of an image for a printer, the method comprising:

preparing a color correction scheme using a color gamma curve varying in accordance with variable values comprising locations of first and second internal points on the color gamma curve and a gamma coefficient;

receiving the variable values as input from a user via a graphical user interface, the gamma coefficient being input to a gamma coefficient input portion of the graphical user interface; and

adjusting the tonal characteristics of the image by reflecting the input variable values in the color correction scheme.

2. (original) The method of claim 1, further comprising:

generating bitmap data as a result of the adjustment of the tonal characteristics; and outputting the bitmap data to the printer

3. (original) The method of claim 1, further comprising:

positioning the first internal point lower and to a left of the second internal point; and programming the first and second internal points where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom.

4. (original) The method of claim 1, wherein the variable values comprise information on spline correction of the color gamma curve.

5. (original) The method of claim 1, wherein the color correction scheme is programmed as one of a printer driver and firmware of a printer.

6. (original) The method of claim 5, further comprising:
inputting the variable values via one of a graphic user interface of the printer driver and a user interface of the printer.

7. (currently amended) A computer-readable recording medium on which a computer-readable program adjusts tonal characteristics of an image using a method, comprising:
preparing a color correction scheme using a color gamma curve varying in accordance with variable values comprising locations of first and second internal points on the color gamma curve and a gamma coefficient;
receiving the variable values as input from a user via a graphical user interface, the gamma coefficient being input to a gamma coefficient input portion of the graphical user interface; and
adjusting the tonal characteristics of the image by reflecting the input variable values in the color correction scheme.

8. (original) The computer-readable recording medium of claim 7, further comprising:
positioning the first internal point lower and to a left of the second internal point; and
programming the first and second internal points where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom.

9. (currently amended) An apparatus adjusting tonal characteristics of an image to a printer, comprising:
a storage unit storing a color correction scheme using a color gamma curve varying in accordance with variable values comprising locations of first and second internal points on the color gamma curve and a gamma coefficient;
a variable input unit receiving the variable values as input from a user via a graphical user interface including a gamma coefficient input portion; and
a tone adjusting unit adjusting the tonal characteristics of the image by reflecting the variable values in the color correction scheme and generating bitmap data as a result of the adjustment of the tonal characteristics, and outputting the bitmap data to the printer.

10. (original) The apparatus of claim 9, wherein the first internal point is located in a position that is lower and to a left of the second internal point, and the first and second internal points are programmed where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom.

11. (original) The apparatus of claim 9, wherein the variable values comprise information of spline correction of the color gamma curve.

12. (original) The apparatus of claim 9, wherein the storage unit stores the color correction scheme programmed as one of a printer driver and firmware of the printer.

13. (original) The apparatus of claim 12, wherein the variable input unit receives the variable values via one of a graphic user interface of the printer driver and a user interface of the printer.

14. (withdrawn) A graphic user interface adjusting tonal characteristics of an original image, comprising:

a first window comprising tone values of the original image arranged along an X-axis and tone values of an adjusted image arranged along a Y-axis and comprising a color gamma curve, which comprises first and second internal points moving along the color gamma curve, and a third internal point moving diagonally with respect to the color gamma curve;

a first variable input portion comprising a first control button corresponding to a first editing box and providing a gamma coefficient value of a predetermined location of the third internal point; and

second through fifth variable input portions comprising second through fifth control buttons, respectively, corresponding to second through fifth editing boxes, respectively, and providing coordinate values of the first and second internal points on the color gamma curve.

15. (withdrawn) The graphic user interface of claim 14, further comprising:

a second window displaying the original image and the adjusted image obtained by varying a shape of the color gamma curve.

16. (withdrawn) The graphic user interface of claim 14, further comprising:
a check box determining whether to perform spline correction on the color gamma curve.

17. (withdrawn) The graphic user interface of claim 14, wherein the first internal point is located in a position that is lower and to a left of the second internal point, and the first and second internal points are programmed where the first internal point moves along the color gamma curve from left to right and from bottom to top and the second internal point moves along the color gamma curve from right to left and from top to bottom.

18. (withdrawn) An apparatus to adjust tonal characteristics of an image, comprising:
a manipulating unit inputting variable values to edit the image;
a display unit displaying the image; and
an image processing unit reading an image correction scheme and adjusting the tonal characteristic of the image based on the variable values and a gamma coefficient, and converting the tone-adjusted image into bitmap data and outputting a signal indicative thereof.

19. (withdrawn) The apparatus of claim 18, wherein the tonal characteristics comprises a brightness or a contrast of the image.

20. (withdrawn) The apparatus of claim 18, wherein a color gamma curve varies in accordance with the variable values comprising locations of first and second internal points on the color gamma curve and the gamma coefficient.

21. (withdrawn) The apparatus of claim 20, wherein the image processing unit comprises:

a coordinate input unit inputting first and second coordinate values to change a shape of the color gamma curve,
a gamma coefficient input unit inputting the gamma coefficient for gamma correction, and
a storage unit storing the image correction scheme.

22. (withdrawn) The apparatus of claim 18, further comprising:
a spline information input unit receiving spline information indicative of whether a spline correction is performed, and outputting a signal indicative thereof to the image processing unit to adjust the tonal characteristic of the image based on the spline information.

23. (withdrawn) The apparatus of claim 21, wherein the manipulating unit comprises a mouse, a keyboard, or a touch panel.

24. (withdrawn) A method of adjusting tonal characteristics of an image for a printer, comprising:

inputting variable values to edit the image;

displaying the image; and

reading an image correction scheme and adjusting the tonal characteristic of the image based on the variable values and a gamma coefficient, and converting the tone-adjusted image into bitmap data and outputting a signal indicative thereof.

25. (withdrawn) The method of claim 24, wherein the tonal characteristics comprises a brightness or a contrast of the image.

26. (withdrawn) The method of claim 24, wherein a color gamma curve varies in accordance with the variable values comprising locations of first and second internal points on the color gamma curve and the gamma coefficient.

27. (withdrawn) The method of claim 24, further comprising:

inputting first and second coordinate values to change a shape of the color gamma curve,

inputting the gamma coefficient for gamma correction, and

storing the image correction scheme.

28. (withdrawn) A computer-readable recording medium on which a computer-readable program adjusts tonal characteristics of an image, comprising:

inputting variable values to edit the image;

displaying the image; and

reading an image correction scheme and adjusting the tonal characteristic of the image based on the variable values and a gamma coefficient, and converting the tone-adjusted image into bitmap data and outputting a signal indicative thereof.

29. (withdrawn) The computer-readable recording medium of claim 28, wherein the

tonal characteristics comprises a brightness or a contrast of the image.

30. (withdrawn) The computer-readable recording medium of claim 28, wherein a color gamma curve varies in accordance with the variable values comprising locations of first and second internal points on the color gamma curve and the gamma coefficient.

31. (withdrawn) The computer-readable recording medium of claim 28, further comprising:
inputting first and second coordinate values to change a shape of the color gamma curve,
inputting the gamma coefficient for gamma correction, and
storing the image correction scheme.

32. (New) A method of adjusting tonal characteristics of an image for a printer, comprising:
preparing a color correction scheme using a color gamma curve varying in accordance with variable values comprising locations of first and second internal points on the color gamma curve, spline correction information and a gamma coefficient;
receiving the variable values as input from a user via a graphical user interface, the gamma coefficient being input to a gamma coefficient input portion of the graphical user interface and the spline correction information being input to a spline information input portion;
and
adjusting the tonal characteristics of the image by reflecting the input variable values in the color correction scheme.

33. (New) The method of claim 32, further comprising displaying an original image, which has not been adjusted, next to an image that has been adjusted by changing a shape of the color gamma curve.

34. (New) The apparatus of claim 9, wherein the graphical user interface further comprises a preview window displaying an original image, which has not been adjusted, next to an image that has been adjusted by changing a shape of the color gamma curve.